

coordination issues such a retrofit entails, the carrier will still have to deal with the quandary presented by roamers whose handsets are based on incompatible technologies, as explained below.

2. Accommodating Roamers

As a percentage of total call volume, Tier III carriers typically originate and terminate more roamer calls than their Tier I and Tier II counterparts. Thus, business necessity compels Tier III carriers to pay special attention to roamer needs and to accommodate those needs whenever possible. Specifically, consumers who use non-ALI-capable handsets or those designed for air interfaces other than the one selected by the foreign system's carrier, or whose home system has deployed a network-based Phase II solution, could be deprived of Phase II ALI indefinitely in rural markets. This result completely undermines the benefit of ALI-capability for the roaming caller in an emergency situation and impedes achievement of the Commission's public safety policy objective

To remedy the handset incompatibility problem, the *Third R&O* required that all handset-based Phase II ALI solutions must be "generally interoperable," which was defined as follows:

This means at a minimum that the solution must conform to general standards that permit the system employed by the carrier to provide 911 ALI for any ALI-capable handset that complies with the general standard, regardless of whether the handset uses the same ALI solution as that employed by the carrier. For example, if SnapTrack, IDC and Lucent all develop and market separate ALI systems, for a particular air interface, handsets using *any* of these solutions must be interoperable with the others, such that a carrier using any one of the solutions can and does provide ALI for calls coming from a handset using any other solutions.^{39/}

Having dictated that all handset solutions be interoperable, the Commission nevertheless acknowledged that roamers on otherwise incompatible handset-based systems will experience

^{39/} *Third R&O*, ¶ 60 (emphasis added). The interoperability requirement for handset-based solutions is codified in Section 20.18(g)(4) of the Rules.

diminished accuracy levels and other performance criteria, and that a “carrier’s system may not be optimized for other handset solutions.”^{40/} This recognition, however, did not prompt the Commission to adjust its locational accuracy standards in general or, more pertinently, for markets served by Tier III carriers who are more dependent on roamer-generated calling than their Tier I or II counterparts. Additionally, other variables can also affect the accuracy of a handset-based solution such as the variance in performance characteristics from one handset manufacturer to another. A serving carrier providing access to a roamer within its market would have no control over the handset which that roamer is actually using.

3. Availability of ALI-Capable Handsets

Timely availability of and prompt accessibility to ALI-capable handsets is another challenge facing Tier III carriers. Because the respective subscriber bases they serve are smaller than those of their Tier I and II counterparts, Tier III carriers are unable to generate sufficient handset demand to warrant direct customer relationships with manufacturers.” As a result, Tier III carriers must deal with wholesalers, distributors and other intermediaries who have no specific commitment to accommodating demand in the smallest and most rural markets. This disparity, coupled with the difficulty small, rural carriers have in obtaining price and quantity information, place them at a

^{40/} *Third R&O*, ¶ 61

^{41/} *See Phase II Stay Order*, ¶ 20 (“This approach recognizes that wireless carriers with relatively small customer bases are at a disadvantage as compared with the large nationwide carriers in acquiring location technologies, network components, and handsets needed to comply with our regulations.”); *see also, id.* ¶ 10 (“ . . . The record demonstrates that non-nationwide CMRS carriers have much less ability than the nationwide CMRS carriers to obtain the specific vendor commitments necessary to deploy E911 immediately . . .”).

distinct disadvantage relative to large nationwide and regional carriers in terms of implementing handset-based Phase II technology.

Of three principal wholesale distributors nationwide, only one was even able to respond to an inquiry made on behalf of Tier III carriers regarding ALI-capable handset availability. In that response, the wholesaler acknowledged that it could not predict the availability, pricing, or quantity of any ALI-capable handsets for rural Tier III carriers.^{42/}

4. Technical Limitations of ALI-Capable Handsets

While the foregoing address concerns over the availability of location service, of even greater concern in the instant context is the fact that there is little empirical evidence as to whether commercially available XLI-capable handsets, even once deployed in a rural environment, can meet the FCC's accuracy requirements. In contrast to urban areas where a significant amount of CMRS traffic is pedestrian, far more rural traffic is generated by vehicular-based portable handsets that lack external antennas.

The position determination capability of ALI-enabled handsets is subject to the technology's innate limitations and constraints. To provide accurate XY coordinate data to the PSAP, these handsets must communicate with GPS satellites. When line-of-sight contact with the satellite is impeded or lost, the "911" dialing subscriber's geographic coordinates cannot be conveyed accurately, even with network assistance. For example, if "911" is dialed when the ALI handset is in a building or structure, or when it is in an automobile or other vehicle (assuming no link between the handset and an exterior antenna), the handset's ALI technology could be degraded depending on

^{42/} Declaration of James C. Egyud, Consulting Engineer, dated November 20, 2002, attached hereto as Appendix D (hereinafter referred to a "*Egyud Declaration*").

the amount of structural and morphological attenuation.^{43/} Even the Commission has acknowledged that handset technology may fail in tall buildings or in tunnels.^{44/}

In practice, once the ALI handset loses contact with the GPS satellite, most handset-based solutions appear to rely on assistance from the network to try and substitute for the lack of available GPS locational information. These “network-assisted” solutions then face the same limitations that network-based solutions do in their ability to consistently and accurately determine the subscriber location, using only existing, wide-spaced rural cell sites.

In light of the foregoing, Tier III Co respectfully requests that the Commission forbear from enforcing the accuracy requirements with respect to carriers that deploy handset-based solutions. To the extent that the handset-based solutions meet the FCC accuracy requirements as some vendors have asserted, grant of the instant forbearance would have absolutely no impact on the locational accuracy achieved by these solutions as the forbearance of enforcing the accuracy requirement would not alter the achievable result. However, it is likely that handset-based solutions will also fall short of attaining the Section 20.18(h) accuracy standards. In that event, substantially more time may be required before an economical Section 20.18(h)-compliant enhancement can be deployed. The limited forbearance sought herein would permit rural carriers that are capable of deploying handset-based solutions on their networks to do so without the fear that, even after such deployment, they may still require individual waivers because of inherent limitations in this technology. To date, widespread rural deployment and handset availability for rural testing has been lacking and accurate “real-world” data collection needs to be obtained

^{43/} *Id.*

^{44/} *Third R&O*, ¶¶ 24, 57.

As with the forbearance request associated with the network-based solution, Tier III Co specifically requests that the Commission forbear, for an initial period up to and including December 31, 2005, from enforcing its accuracy requirements in the instance where a wireless carrier, in a rural environment, deploys a handset-based solution, in timely response to a PSAP request.^{45/} During this period of time, the wireless carrier deploying a handset-based solution would file quarterly reports of all E911 location activity and, to the extent made available by the PSAP, the distance between the provided location and actual location of the 911 caller, as well as time required to locate the 911 caller once the emergency personnel arrived at the location provided by the handset-based solution. This information, gathered over the period during which this forbearance was in effect, would provide valuable real-world information which the Commission could use to evaluate the accuracy of handset-based solutions in a rural, real world application and provide a basis upon which to determine whether there is a need to enforce more stringent location standards in rural environments. Again, if the handset-based solutions actually prove capable of providing the level of accuracy that has been touted but remains unproven in rural applications, the grant of this forbearance would have absolutely no impact on the availability of E911 Phase II service that meets the accuracy requirements. However, in the event that the technology falls short in a the real-world rural application, the denial of this forbearance request would do nothing to result in a higher level of accuracy being achievable ahead of the schedule needed by the vendors to actually address the rural ALI issues. All the forbearance would do would be to relieve the FCC from a flood of last-minute

^{45/} Of course, there may still be the need to further extend the ALI-compatible handset deadlines if the requisite handsets continue to be unavailable in sufficient quantity to enable the rural carriers, forced to buy through distributors, to meet those milestones.

individual rural carrier waiver requests and relieve rural carriers from the prospect of facing ruinous enforcement proceedings over issues wholly beyond their control.

C. TECHNICAL, OPERATIONAL AND PRACTICAL CONCERNS COMMON TO BOTH NETWORK-BASED AND HANDSET-BASED SOLUTIONS

The preceding sections have examined how certain unique attributes of network-based and handset-based solutions make the accuracy and reliability standards set forth in Section 20.18(h) economically unattainable for Tier III carriers within at least the next two year period. The following analysis considers certain technical, operational and practical Characteristics common to both network and handset solutions that severely hinder Tier III carriers from attaining Section 20.18(h) accuracy or otherwise demonstrate why strictly enforcing that accuracy standard against Tier III carriers will subvert the Commission's public interest and policy objectives in instituting the Enhanced 911 Emergency Calling Systems docket

1. Reliability Of Test Data and Test Guidelines

At various junctures in the course of the Enhanced 911 Emergency Calling Systems docket, the Commission has cited favorably to pre-deployment testing of network-based and handset-based solutions and the accuracy levels achieved thereby.^{46/} Moreover, the Commission cites these test results to substantiate its E911 Phase II policy decisions, including accuracy standards, and to assert that carriers will be able to satisfy Section 20.18(h) accuracy and reliability with available technology.^{47/} Tier II Co respectfully submits, however, that the referenced test data is subject to

^{46/} See e.g. *Fourth MO&O*, ¶¶ 18 - 20 (and tests cited therein)

^{47/} *Id.* at ¶ 23.

serious limitations and that the Commission's unquestioning reliance on that data may have been inappropriate considering the context in which the tests were performed

Conceptual issues raised by the Commission's reliance on pre-deployment testing were concisely outlined in the *Hatfield Report*:

Clearly, the performance in the latter, "real world" environment can only approach the inherent performance characteristics of the technology in a more idealized environment. For example, in an actual operating network, the *distances between base stations may be greater* or their geometry may be far from ideal. Or a particular portion of a network may suffer from greater intra-system interference than in a more idealized, pre-deployment test bed. These "real world" conditions can prevent a terrestrial, network based solution from delivering the accuracy of which it is inherently capable. Similarly, the presence of dense foliage or "urban canyons" may prevent a satellite-based (i.e., GPS) system from achieving its full performance.^{48/}

These inherent limitations in the testing that contributed to the Commission's decision-making in adopting Section 20.18(h) are hardly academic or speculative. Indeed, the differences between the "idealized environment" in which pre-deployment tests were performed and the real world conditions faced by Tier III carriers are especially significant. One critical example of this disparity involves the technical and economic challenges posed in Tier III markets by their relatively low number of potential subscribers and meager population densities. These immutable demographic facts compel Tier III carriers to maximize cell separation wherever possible--- the polar opposite of the idealized spacing employed by vendors when conducting pre-deployment testing.

^{48/} *Hatfield Report*, p. 35 (emphasis added).

In an *ex parte* filing, Grayson Communications, a prominent location technology vendor, presented test results for network-based systems it installed in Illinois and Indiana. Tier III Co's analysis of the filing revealed the same concerns and disparities noted in the *Hatfield Report*. Thus, the test map submitted in Grayson's *ex parte* indicates unambiguously that all test measurements were collected from *within* the perimeter of the transmitting facilities that Grayson equipped with its network-based Phase II solution hardware; no measurements were presented from outside or beyond the perimeter or cluster.^{49/} In stark contrast to this idealized compiling of test results, Tier III carriers operate systems where coverage is provided in areas extending several miles beyond the outer perimeter of the carrier's cell or transmitting sites. The Grayson test results provide no data indicating whether Section 20.18(h) accuracy can be achieved for 911 calls in these areas. RF engineering principles, however, suggest the mandatory accuracy cannot be achieved because these calls will occur in areas with less overlapping coverage than calls made from within the perimeter of equipped transmitting sites.^{50/} Another notable feature of the Grayson tests is that the maximum spacing between equipped sites within the test area was roughly ten (10) miles, considerably less than the 15 - 20 mile spacing encountered between facilities in a typical Tier III service area. Locational accuracy in the latter scenario will be less than in the former.^{51/}

^{49/} *Egyud Declaration*

^{50/} *Id.* Moreover, if a PSAP boundary extends entirely beyond a carrier's actual coverage area, a 911 call will be impossible in this non-overlapped area, unless the carrier installs additional cell sites for the sole purpose of extending its E911 coverage— a substantial capital expense that will generate no offsetting revenue.

^{51/} *Id.*

The *Hatfield Report's* analysis of the Commission's guidelines for determining whether position location systems comply with Section 20.18(h) provides another example of how strict adherence to this exacting standard may actually *diminish* safety of life and property, in direct contravention of the Commission's paramount policy objective in the Enhanced 911 Emergency Calling Systems docket.^{52/} First, *Hatfield* correctly notes that, while *OET-71* establishes basic guidelines for determining whether operating systems comply with Section 20.18(h) accuracy requirements, it is not "a complete test specification and that, as a result, there is significant room for interpretation and, therefore, disagreement."^{53/} Thus, there is presently no Commission-approved protocol that carriers can use to verify to the Commission's satisfaction that the Phase II solutions they deployed comply with Section 20.18(h).

This lack of a definitive set of guidelines and protocols for testing the accuracy of deployed systems leads to a very unsettling implication, also discussed in the *Hatfield Report*. The accuracy of the position determination corresponding to an individual E911 call will increase with the number of measurements taken and the processing time allowed. For this reason, a Phase II system incapable of meeting Section 20.18(h) standards initially could ultimately attain compliance by delaying "either the initial delivery of the call itself or subsequent delivery of the position information (*i.e.*, the XY

^{52/} The Commission's guidelines are set forth in OET Bulletin No. 71, Guidelines for Testing and Verifying the Accuracy of Wireless E911 Location Systems, Federal Communications Commission, April 12, 2000 ("*OET-71*").

^{53/} *Hatfield Report*, p. 35. Indeed, the introduction to *OET-71* (p. 2) plainly admits that the document intends only to provide guidance and "be helpful" to groups and organizations that seek to develop standard test conditions and protocols.

coordinates).^{54/} Delay in delivering the call itself may cause the “911” caller to abandon the call completely, or to abandon and retry. Delay in delivering the corresponding position information may cause the call to be misdirected or “timed-out” by a switching machine.

By trying to achieve compliance with the exacting accuracy requirement of Section 20.18(h), the carrier may inadvertently cause a “911” call to be abandoned, misdirected or “timed-out,” precluding or delaying the caller’s access to emergency service. As a result, by committing itself to an accuracy standard that appears unrealistically high in rural applications, the Commission may subvert that public safety objective whose promotion and enhancement impelled the Commission to require wireless carriers to develop and deploy Phase II E911 solutions.

2. Cross-Technology Roaming

The Commission has acknowledged that wireless subscribers whose home systems have deployed network-based Phase II E911 technology will generally be deprived of this capability when roaming in networks utilizing a handset-based solution.^{55/} Several solutions, which the Commission collectively refers to as a “best practice” approach, are suggested to handset-based callers^{56/}. First, “where only Phase I accuracy is reasonably available,” the carrier should provide it to all 911

^{54/} *Id.*

^{55/} *Third Lido, ¶ 5*

^{56/} The “best practice” approach is codified in the Commission’s Rules at Section 20.18(g)(3), which states:

For all 911 calls from portable or mobile phones that do not contain the hardware and/or software needed to enable the licensee to provide Phase II enhanced 911 service, the licensee shall, after a PSAP request is received, support, in the area served by the PSAP, Phase I location for 911 calls or other available best practice method of providing the location of the portable or mobile phone to the PSAP.

carriers. The Commission has also referred favorably to a possible software upgrade for CDMA systems to provide ALI with accuracy approximating 285 meters, which it describes as "somewhat more accurate" than Phase I location accuracy.⁵⁷ Finally, the Commission has suggested that handset-based carriers should use the infrastructure of a co-located wireless carrier that has deployed a network-based solution "as a backup, in order to provide Phase II ALI to its callers whenever its own ALI solution cannot."

Several aspects of the "best practice" approach are instructive with respect to the issues raised in this petition. First, only the Phase I option, which the Commission admits provides a "rough level of accuracy," is expressly mentioned in Section 20.18(g)(3). Tier III Co has no information concerning availability or cost of the CDMA upgrade option, which offers only a marginal improvement in accuracy over the Phase I. Whether this upgrade even exists is unknown. Finally, the back-up suggestion assumes both the existence of a co-located wireless system that has deployed network-based technology and reasonable technical means for transferring a "911" call from one network to another. In any event, all of these "suggestions" are meaningless if the strict accuracy requirements of Section 20.18(h) remain in effect.

IV. THE COMMISSION SHOULD FORBEAR FROM ENFORCING SECTION 20.18(h) OF ITS RULES AGAINST TIER III CARRIERS

Although not a waiver request, Tier III Co's instant proposal complies with prior Commission directives that petitions seeking waiver relief from Section 20.18 must be "specific, focused and

limited in scope, and [show] a clear path to full compliance.”^{58/} The instant petition, though seeking agency forbearance under Section 10 of the Act, complies with requirements that the Commission has imposed on rule waiver petitions even though the latter impose a more difficult burden and higher legal hurdle on the petitioner.

The instant petition also satisfies the standards imposed by the Act for petitions of this type. Thus, Tier III Co demonstrates below that strict application of Section 20.18(h) to Tier III carriers is unnecessary to ensure that the charges, practices, and classifications of Tier III Co’s participating carriers are just, reasonable and non-discriminatory. Moreover, strict enforcement of Section 20.18(h) against Tier III carriers is unnecessary to protect consumers, and forbearing from that enforcement will encourage competition in the relevant service markets. For this reason, forbearance is decidedly in the public interest and should be granted here.

It is worth restating the principle, recognized by the Commission, that accuracy is only one gauge of wireless E911’s contribution to public safety. Other equally important variables include reliability, cost and extent of deployment. If strict enforcement of Section 20.18(h)’s accuracy standards against Tier III carriers were to reduce the reliability and extent of deployment, while substantially inflating costs, the ramifications for public safety in small, rural service areas will be adverse. Enforcing Section 20.18(h) against Tier III carriers is, however, likely to have this perverse outcome because of the considerable technical, operational, practical, economic and strategic concerns that implementing Phase II technology, both network and handset-based, in the physical environment served by Tier III carriers presents.

^{58/} *Fourth MO&O*, at ¶44

A. THE FORBEARANCE SOUGHT HERE IS SPECIFIC, FOCUSED AND LIMITED IN SCOPE

The forbearance relief sought here is unambiguously specific, focused and limited in scope. Notably, Tier III Co is *not* seeking forbearance from the obligation to select, order, install and optimize Phase II solutions within six months of a PSAP request or on September 1, 2003, whichever occurs later. Nor is Tier III Co requesting relief from the population or territorial coverage requirements associated with initiating those solutions. Tier III Co accepts and will abide by those obligations.

By granting this petition, the Commission will authorize rural carriers to install network and handset-based Phase II solutions within the coverage area of their respective networks from transmitting facilities as they presently exist. By so doing, the Commission signifies that it will accept and deem compliant the resulting accuracy levels— even if they fall outside the margins established by Section 20.18(h), for an interim period of time during which the underlying premise of the need for a higher level of accuracy in a rural environment can be tested and evaluated. Thus, the proposed forbearance is narrowly tailored and limited in scope to reflect the technical, operational, and practical obstacles discussed earlier, that make attaining Section 20.18(h) accuracy unfeasible in Tier III markets.

Because the forbearance requested here is for a fixed period, the path to full compliance is straightforward. During the forbearance period, Tier III Co will work with its equipment vendors and other experts to overcome the many difficult issues that continue to vex Phase II technology solutions in the smallest, rural markets served by Tier III carriers. As these matters are resolved, accuracy and reliability of the Tier III Co Phase II systems will improve. At the same time, the

Tier III Co request offers the opportunity for the Commission to determine what real-world location accuracy level is truly required in rural applications to meet the public safety need. Tier III Co submits that pinpointing a 911 caller to within 500 meters in a rural application might well result in the authorities being able to actually find the caller (the only purpose behind E911 Phase II rules at all) in far less time than knowing the caller's location to within 150 meters in the center of a large urban area having, for example, four (4), fifty-story office buildings lying within that location parameter. As with many regulations, "one size fits all" is likely to prove to be incorrect in this application. Accordingly, requiring rural carriers to spend far greater sums of money in an effort to immediately achieve a level of accuracy that might prove both unnecessary and unattainable is clearly not in the public interest.

B. THIS REQUEST SATISFIES ALL SECTION 10 REQUIREMENTS

As discussed, Section 10 of the Act compels the Commission to forbear from applying any regulation to a telecommunications carrier (or service) upon finding that enforcement of the regulation is unnecessary either to ensure that the carrier's rates, practices, classifications, *etc.* are just, reasonable and non-discriminatory, or to protect consumers.^{59/} In addition, the Commission must determine that forbearance is consistent with the public interest and, in so doing, must "consider" whether forbearance will promote competitive market conditions (including encouragement of competition among telecommunications providers).^{60/} The limited forbearance

^{59/} 47 U.S.C. § 160(a)(1) and (2)

^{60/} 47 U.S.C. § 160(a)(3) and (b). Even if a petitioner fails to show that forbearance enhances competition among carriers, 47 U.S.C. § 160(b) does not bar the Commission from granting forbearance. The Commission has held that the public interest factor in § 160(a)(3) is a broad standard that should be exercised in a manner consistent with the Act's other goals. *See Bell*

(continued...)

requested here with respect to subjecting Tier III carriers to Section 20.18(h) more than complies with these statutory constraints. Indeed, TierIII Co will demonstrate below that forbearing from Section 20.18(h) as specified herein will actually prevent Tier III carriers' charges from *becoming* unjust, unreasonable and discriminatory due to attempted compliance with the demanding accuracy levels that rule section imposes

1. Forbearance Will Allow Tier III Carriers To Maintain Rates, Practices and Classifications That Are Just, Reasonable and Non-Discriminatory

For Tier III carriers selecting network-based Phase II technology, strict compliance with the Section 20.18(h) quantitative accuracy criteria necessitates construction of new base stations at the [perimeter of a carrier's licensed service areas and in other situations where "ribbon of pearls" or other minimally overlapping cellular configurations are presently deployed. This new infrastructure, which is in addition to the Phase II network elements that must be installed at each existing cell (costing tens of thousands of dollars per cell *not including* the cost of the site itself, the recurring back-haul, and capital improvements, such as the tower, required at the 911-only site), will generate little or no incremental revenue. Indeed, the need to place these cell sites beyond the edge of the rural carrier's licensed service area in order to effectively "triangulate back" into the rural carrier's licensed service area *virtually* ensures that these multiple sites, ringing the carrier's licensed service area but located beyond the carrier's licensed service area; can *never* be used for the carrier to actually provide CMRS service. The capital expenditure and operating costs associated with this

⁶⁰(...continued)

Operating Companies Petition for Forbearance from the Application of Section 272 of the Communications Act of 1934, As Amended, to Certain Activities, CC Docket No. 96-149, 13 FCC Rcd 2627 (1998) (rejecting AT&T's suggestion that forbearance must enhance competition).

infrastructure will have to be recovered entirely from a Tier III carrier's comparatively meager complement of existing local subscribers. As a result, strict enforcement of Section 20.18(h) against Tier III carriers will inevitably cause substantial rate increases for rural consumers, residential and business alike, which, in turn, may cause these users to terminate or curtail mobile wireless service.^{61/}

Tier III carriers opting for a handset solution are hardly better off with respect to the inordinate costs and inevitable rate increases that strict Section 20.18(h) portends. TDMA-based Tier III carriers, for example, can deploy handset technology only if they first retrofit their networks with a new digital protocol. The staggering capital expenditure associated with this migration—which is incremental to, rather than in place of, the cost associated with replacing the existing stock of deployed handsets—will again be recovered from a limited pool of rural residential and business subscribers. Moreover, even where a carrier presently deploys a digital network technology for which ALI-capable handsets are available, deploying network enhancements, if needed, to increase the accuracy to the level required by the rules can substantially increase costs for that deployment as well.

Strict enforcement of Section 20.18(h) is hardly necessary to ensure that Tier III carriers' rates are just, reasonable and non-discriminatory. As shown above, however, such enforcement is likely to precipitate enormous, but otherwise superfluous capital expenditures by Tier III carriers;

^{61/} In this regard, the Commission must be intensely sensitive to the law of unintended consequences. It is well known, for example, that automotive catalytic converters, which were reasonably intended to reduce air pollution, inflated new car prices to the extent that their mandatory imposition led to a secular decrease in the frequency with which owners replaced their vehicles; as a result, older, more polluting cars remained in use for longer periods, subverting the air quality improvement that converters were supposed to accomplish. If strict enforcement of Section 20.18(h) causes subscribers in Tier III markets to discontinue (or substitute a less expensive, non-911 capable) service, government regulation, admittedly well-intentioned, will have the ironic effect of diminishing rather than enhancing the safety of life and property.

the inevitable rate hikes these expenditures necessitate may, ironically, cause the unjust and unreasonable rates that Section 10(a)(1) was designed to preclude." With the long standing goal of expanding telecommunications services into the "high-cost" rural areas without pricing those services out of reach of the rural user, imposing an urban accuracy standard on a rural carrier that actually results in a dramatically increased cost of service to the rural customer is contrary to this universal goal. Thus, the limited forbearance requested here indisputably meets the first enumerated requirement of the forbearance statute.

2. Forbearance Is Consistent With and May Enhance Consumer Protection

The statute also requires the Commission to determine that enforcing Section 20.18(h) is "not necessary for the protection of consumers." The Commission has already recognized that an accuracy standard that is eminently reasonable for urban areas may be unrealistically stringent in small, rural markets. In those markets, the Commission concluded that a 300 meter accuracy benchmark will offer "a *very useful* indication of location"^{63/}

This view comports with simple common sense. In wide-open, sparsely populated Tier III markets, which lack dense housing developments, multi-story apartment and office structures, and underground facilities (e.g. parking), a flexible accuracy standard of 300 (or more) meters is unlikely to have any adverse impact on successful position determination. In this respect, strict adherence to Section 20.18(h) accuracy is unnecessary to protect consumers in Tier III markets and

^{62/} An alternative, but no more desirable outcome is the necessity for rate adjustments that make the Tier III carrier's service noncompetitive. In this regard, at least Tier II and Tier III carriers have the distinct advantage of being able to subsidize their high-cost rural E911 compliance with their urban and suburban subscriber bases.

^{63/} *Third R&O* (¶ 72) (emphasis added).

the two-year, limited forbearance urged here implies no detriment to consumer interests. Strict enforcement, by contrast, may induce Tier III carriers to make imprudent and wasteful capital expenditures, whose recovery from local subscribers could pressure them to terminate or curtail their mobile wireless service. Such an outcome will make consumers less safe and diminish protection of their lives and property.⁶⁴ Moreover, as discussed above, where compliance with the Phase II obligations is unduly burdensome on particular carriers, the Commission has left the door open for the carriers to seek relief from those obligations. Grant of the forbearance sought herein would allow rural carriers to proceed with an economical deployment of Phase II technology in a timely manner.

3. Forbearance Will Enable Tier III Carriers to Serve Their Markets While Rolling Out Phase II E911 Solutions

While aware of and concerned by their obligations to implement E911 Phase II, Tier III carriers have other major undertakings on their near-term agendas. Financial survival in an environment where Tier I and Tier II rivals are increasingly building facilities to serve the most desirable highways and other traffic generators is a critical priority. In addition to E911, Tier III carriers must strive to comply with other unfunded federal mandates like CALEA, number pooling and local number portability, all of which have their own substantial capital expenditure requirements and many of which also hit rural carriers disproportionately.

At the same time, Tier III carriers, as well as their larger counterparts, must devote scarce resources to the quotidian task of reinforcing coverage and expanding footprints to attract new subscribers while retaining existing ones. Tier III Co respectfully submits that competition among rival carriers will be better fueled by allowing Tier III carriers to direct their very limited resources

⁶⁴ See *Phase II Stay Order*, ¶ 4 (“For many Americans, the ability to call for help in an emergency is the principal reason they own a wireless phone.”)

to continued network development and deployment in tandem with the Phase II rollout. Absent forbearance, however, Tier III Co's members will be forced to concentrate their capital spending almost exclusively on the infrastructure and elements required to achieve Section 20.18(h) compliance rather than the balanced approach necessitated by present market realities.

The Commission must also consider that while Tier I and Tier II carriers are overbuilding the major traffic arteries and larger population centers in the rural markets, Tier III carriers remain focused on bringing wireless service to the most remote and least-served areas where the return on investment is much longer. If a rural carrier is providing service to a marginal area, deploying E911 Phase II service to that area that provides location accuracy to within the present accuracy level mandated for the community with a total population of 1000 on the same level as for an urban area with a multi-million person population, might well make it uneconomical for the rural carrier to continue providing service to that area. A rural carrier can also obviate its Phase II accuracy obligations by simply terminating its CMRS service in that rural PSAP's coverage area or not expanding service into those more-remote areas in the first place. Tier III Co respectfully submits that the public interest is far better served by a reduced level of accuracy for Phase II location services in these rural areas than to inflexibly insist on strict compliance and thereby ensure that all calls, including emergency 911 calls, go uncompleted because there is no carrier providing service there.

The limited two-year forbearance proposed here will greatly facilitate Tier III carriers' ability to make all the capital expenditures necessary for providing high quality and reliable service to their customer bases and may well provide the Commission with sufficient real-world documentation to demonstrate that a lower rural accuracy standard does not compromise the public safety. Strict enforcement of Section 20.18(h) accuracy, on the other hand, will undermine that ability and will

impel carriers into exorbitant and imprudent capital expenditures for the sole purpose of attempting to satisfy the accuracy benchmarks which, even after such expenditures, might not be economically achievable in a rural application with today's technology. Accordingly, limited forbearance, as proposed here, will strengthen the ability of Tier III carriers to compete in the marketplace; strict enforcement will undercut that ability. Forbearance will, therefore, promote competitive market conditions and, as a result, forbearance satisfies the public interest requirement set forth in Section 10(a)(3) of the Act.

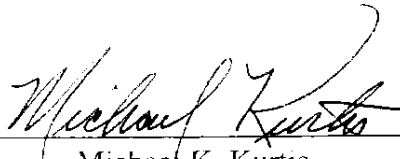
V. CONCLUSION

For the reasons provided herein, the Commission should forbear from enforcing the accuracy standards in Section 20.18(h) of the Rules up to and including December 31, 2005.

Respectfully submitted,

THE TIER III COALITION FOR WIRELESS E911

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